

Kentucky Water Well Driller's Certification Board

Meeting Minutes
November 9, 2012

Opening Remarks:

Danny Kelly called to order the regular meeting of the Water Well Drillers Certification Board ("the Board") at 09:20 AM, on **November 9**, 2012. General Butler State Park near Carrollton, Kentucky was the location of the meeting.

Roll Call:

Danny Kelly made roll call and all board members were present, with the exception of Todd Mills. Danny had everyone make self introductions for the guest in attendance of the board meeting.

Present:

Danny Kelly Chairman, Regional Water Well Driller Representative
Orris Hayes, Regional Water Well Driller Representative
Bart Davidson, KGS Representative
David Jackson, Cabinet Representative
Jim Bates II, Regional Water Well Driller Representative
Roy Toney, Public at Large Representative
Scotty Robertson, Water Well Driller Certification Program Coordinator

Guests:

Kevin Moses, Moses Drilling
David Moore, Kentucky Division of Plumbing

Absent:

Todd Mills, Regional Monitoring Well Driller Representative

Announcements:

Danny Kelly asked for any announcements. David Jackson announced that Peter Goodman and Jessica Moore from the DOW attended the Ground Water Protection Council. Danny stated the Kentucky Ground Water Association meets the next weekend in Bowling Green, Kentucky to work up dates for the next driller's workshop and tradeshow. They have a few tentative dates in mind for February or March, but the KGWA Board will be meeting to determine the actual date and location of the tradeshow and program for the workshop. Once decided, Scotty will be putting that information in the drillers' newsletter. Melody Burgess will also be getting something out on the workshop and on the classes offered. Danny said we have some pretty-good classes for the tradeshow. Danny ask if there were any further announcements.

Orris said he talked to Representative Leslie Combs about the geothermal bill and that it was the first thing on her agenda in the next session of the legislature. He also talked to Senator Ray Jones who is also in support of the bill and would mention it to other senators. He did not get to, but will talk with, Senator Greg Stumbo and others before the legislature meets. Danny said he did talk to Senator Stan Humphreys who replaces Ken Winters who retired. Danny said we also have the support of Representative Steve Ruddy. Richard Heath took Senator Nessler place and he will support us. Danny ask for any other announcements. No one else responded, so Danny moved to reading of the minutes.

Reading of Minutes:

Scotty handed out the meeting agenda and the minutes of the September 14, 2012 board meeting prior to the start of this board meeting. The members silently read the minutes of the meeting. Danny asked if everyone had read and was satisfied with the minutes, or had comments. Once everyone affirmed that they had read the minutes. Roy had a question on backlog of entering data on pages 3 paragraph 3. The five dollar fee facilitate getting the records process. Todd mills had suggested it in the meeting. Danny responded no. Scotty said that it was an arbitrary amount that Todd had made in last meeting, the board had not approved it nor was this the actual cost of currently processing well logs. Danny went on to say that he thought that fees if any for processing the paper work should be put in a permit application fee that is not itemized like Tennessee does now. Kevin stated he is not behind anything that creates him more work . Orris corrected a mistake on second page in the minutes. Stated "Orris had been in touch with Leslie Combs and Ray Jones members of the Kentucky House of Representatives.", Leslie Combs is actually a representative and Ray Jones is actually Senator. Danny asked for a motion to approve the minutes.

Roy Toney made a motion to approve the minutes of the September 14, 2012 Kentucky Water Well Drillers Board meeting and David seconded the motion. Danny asked for a vote to approve the minutes. The motion to approve the minutes, was approved as revised, unanimously by the board.

Old Business:

Danny started the discussion of old business by asking about status of the Layne project. Scotty stated that as far as he knew the project had not moved forward. Next Danny asked about the Underground Storage Tank issues status.

David said he talked with UST and they have gone to a risk based closure procedure for closing out old UST sites. Water wells near a UST, raises the risk near pristine farm. If a contractor finds a well in close proximity to contamination, they can lower the risk by abandonment of the domestic use well. UST Branch says this is not happening on regular basis, but Scotty has had three such requests, recently. UST Branch stated that they are not encouraging this as a remedial method. The problem we see is monitoring well drillers are not certified water well drillers. David told the UST Branch that we would allow monitoring well drillers a one time only variance to plug a domestic use well, but after that one time, they would have to become certified

as a water well driller or hire a certified water well driller abandon any more. The other issue is the sampling methodology for sampling a domestic use well. UST says this is a consultants problems. So, what DOW and the board can develop a sampling method for doing so.

Orris suggested that a frequency be added for the variance such as once every two years. David responded something like that could be done. Orris suggested getting sampling guidelines from laboratories that sample groundwater on a regular basis. Danny ask if board needed to take this on? David suggested that we publish these in newsletter and include in training.

David Jackson suggested we take up the Division of Plumbing memorandum of agreement. David Moore said that they had come up with language for the MOA for a more official agreement between the Division of Water and Division of Plumbing on connecting the well. David Moore went on to describe the issue at hand based on previous discussion and problems encountered. DOP is trying to get well driller to contact the plumbing inspector when making a connection and let the plumbing inspector observe the drillers installation from the well to the pressure tank. It would be a courtesy inspection no fee or permit needed.

David Moore said where this had come up was in western Kentucky where a driller had several times violated plumbing regulations. When he brought up the issue before the code committee, they asked why not have the drillers contact the plumbing inspector to come out to property as courtesy to make sure water lines are buried 30 inches. That is why he is here today to get Water Well Certification board to grant agree to the courtesy inspections. Danny had a question. Does DOP wants line left open to inspection when tank is in basement? David said correct. Danny said in the past we had buried line but left a standpipe over line so inspector to view it, is this OK? David responded by saying yes, and he explained inspectors schedules and issues. DOP wants Drillers to put standpipes in let DOP check it. Then, pull standpipes and bury lines. That gives drillers protection and home owners too. David said that would help a lot. Danny asked do you have a regulation on how far standpipes are to be apart, like fifty foot? David said depends on how long the waterline is but, 25 feet to 50 ft intervals are normal. Danny asked are there any regulations on whether or not electrical line can be run with the waterline? David responded no that is alright to do. Danny said We have no problem with doing this.

Danny said the standing pipes makes inspection so simple. David Moore agreed with Danny. Danny said you said buried thirty inches deep, but most city lines are not buried that deep. David responded no they are not but the lines are angled down 45 degrees from the meters to thirty inches below grade. Water meters are eighteen inches because they are close enough to water main to prevent freezing.

Jim Bates verified the thirty-inch burial depth has been that for many years, placing the water line below the frost line has always been the requirement. David Jackson said a question came up at last meeting about the pump, line, and tank all needed to be installed together as a unit. Will the standpipe effect this? Danny said no it will not. A standpipe is just a sight-pipe. That the DOP uses a four inch diameter PVC (sdr-35) pipe as a sight-pipe. Danny asked do you have to have the writing on the water line facing up so that it is visible in the sight-pipe? David Moore indicated that you should, yes.

Kevin Moses said as a water well driller, he does not set pumps. Someone comes behind him to do this. How far is the driller allowed to go with the waterline, to the tank, to the switch? David Moore said he talked to Director of the DOP and what has always been the case is they go to the tank and valve for sampling point and that is where the plumber ties into the system. The problem arises when a driller connects here then runs a water line to the post hydrant. David Jackson said then drillers are responsible for everything up to the tank and can, a driller can install a frost-free hydrant with a double check valve in line prior to the tank. The answer is yes according to David Moore. A double check valve is placed right next to hydrant before it goes out of ground.

So Danny said from what I gather here is that nothing has changed the way we have always done it is the way it is to continue to be done, and I have no problem with it. David Moore said what they are asking that one driller has installed lines that he call the plumbing inspector to come out and inspect the system through the sight pipes. Orris asked what changes if the well driller puts the pump in basement instead of well house or vise versa? According to David Moore the way it stands now, the water well driller has jurisdiction to the expansion (pressure) tank. Regardless of where it's placed. If the driller puts expansion tank, test hydrant in the well house, then a line to the house would be a service line and DOP has jurisdiction over it. Danny said if the tank is put in basement the water well driller nor the home owner have to have a permit to install the waterline, but it needs to be inspected by DOP. David Moore said the inspection is a courtesy inspection it will not cost the driller or homeowner anything. DOP just wants the opportunity to inspect the waterlines so that everyone is protected.

David Moore then read the Memorandum of Agreement between the Division of Plumbing and Division of Water to the water well certification board. Orris asked if this memorandum is the same all over the state and David Moore responded that it covers the whole state. The post hydrant is permanent if left over 90 days. David Jackson said we can put all of this in the newsletter. Maybe have a class at the tradeshow to explain this. David Moore volunteered to give a class at the trade show.

Orris asked David Moore if he was associated with Hank Hancock who had contacted the board on behalf of the HVAC contractors. David Moore responded he knew him but was not associated with him. Scotty spoke up that Hank Hancock had asked him to bring up the KY HVAC contractors concerns with the geothermal drillers certification legislation being proposed by the Kentucky Groundwater Association. David Jackson said let us close this discussion first.

David Jackson asked if everybody else satisfied with the Memorandum of Agreement. A brief discussion about the EPAs 2014 requirements for removal of lead from brass fittings and post hydrant installations discussed. All of the board members stated they were in favor of it.

David Moore is to supply list of inspectors and phone numbers to be put in newsletter.

Danny said I think Orris covered the status of the geothermal legislation. Orris said still do not have cost for state to administer the program. A brief discussion followed about support documentation. Scotty mentioned to the board that he had done some cost research and presented that data to the board. He talked with every state surrounding Kentucky, none replied.

So, he did some internet research and provide a table that surrounding states were charging to register a geothermal or water well driller. Scotty also provided a table of costs for permit applications and fees for all fifty states to install water wells done by Jo Blanset and Deven Carigan. Scotty explained how other states charge for geothermal well permit fees. Scotty said the current cost of Kentucky's well driller certification program costs the state about \$90,000.00 annually, as he has been told. The board can expect at least this amount of additional costs to be added at minimum, if geothermal certification is approved. Orris stated we have 171 certified drillers in the state, but this includes drillers from surrounding states. Orris how many did adding monitoring well drillers add to the drillers program. Scotty did not have this data, but stated work was added to the program and a certification fee assessed but this fee was insufficient to pay for the added work incurred to administer the program. Orris said then we would double the work again and not increase the income sufficiently. Scotty added unless you added in a permit fee or record processing fee. Orris, so we need to work a fee program to pay for this.

Danny said in Kentucky if you have a water well driller certification it costs you \$100.00, if I have a monitoring well certification is that \$200.00. Scotty said, no it is still \$100.00. Scotty stated there has been no increase in cost since the program started in 1985. Scotty said the board will have to determine whether they want to charge a permit fee or have an increase in license fee. It would probably be more beneficial to the program to have a permit fee rather than an increased certification fee. Kevin Moses said if you do it on a permit fee it will always reflect how the industry is doing where as a certification fee does no such thing. Orris asked Kevin how many homes he did a year. Kevin stated he did about 250 homes a year with about four-to-eight wells each. Orris state public building and factories would require more holes and would have to pay a lot more money, this would be favorable to the program. David Jackson said if we looked at Tennessee's fee structure, we would be adding \$75.00 to \$150.00 per house.

Scotty stated that the other thing he has been dealing with is discussing the geothermal bill with Hank Hancock. The Kentucky association for HVAC had some concern with the wording of definitions in the proposed bill. David Moore stated that the HVAC contractors are concerned that definitions lead one to believe that a driller is in charge of the whole geothermal project as opposed to just drilling the holes and placing pipe and backfilling in them. Scotty said the HVAC contractors want to work with this board to change wording before it goes to legislature so they can support it.

Danny, Orris, and Kevin ask for an explanation, as they did not see that in regulation. A discussion followed and David Jackson suggested changing the wording in the bill. The following changes were eventually agreed upon to being made to the proposed amendment to the drilling statutes:

“AN ACT relating to geothermal systems.

Be it enacted by the General Assembly of the Commonwealth of Kentucky:

□Section 1. KRS 223.400 is amended to read as follows:

As used in KRS 223.405 to 223.460, unless the context requires otherwise:

(1) "Alteration or repair of a water well" means any maintenance, addition, or change of well or pitless adapter, but does not include replacement or repair of a water pump or associated piping.

(2) "Board" means the Kentucky Water Well Certification Board;

(3) "Cabinet" means the Energy and Environment Cabinet;

(4) "Certificate" means a certificate of competency issued by the secretary stating that the water well driller has met all the requirements for the appropriate classification set forth in KRS 223.405 to 223.460 or by regulation;

(5) "Geothermal borehole" means any opening in the surface of the earth that is drilled, cored, bored, washed, driven, jetted, excavated, or otherwise constructed when the actual or intended use is in whole or in part for extracting or transferring heat from the earth through an open or closed loop system for domestic or industrial purposes, which may include the removal, recirculation, or injection of water or other fluids;

(6) "Geothermal loop system" means any open or closed loop system that is installed for the purpose of extracting or transferring heat from the earth for domestic or industrial purposes;

(7) "Person" means an individual, corporation, partnership, association, municipality, state and federal government, or other public body or other legal entity, or any officer, employee, or agent of any of the foregoing.

~~(8)(6)~~ "Secretary" means the secretary of the Energy and Environment Cabinet;

~~(9)(7)~~ "Water well" or "well" means any excavation or opening in the surface of the earth, including a geothermal borehole, that is drilled, cored, bored, washed, driven, jetted, or otherwise constructed when the actual or intended use in whole or part of an excavation is the circulation of fluids for geothermal purposes or the removal of water for any purpose, including but not limited to culinary and household purposes, animal consumption, food manufacture, use of geothermal resources for domestic heating purposes and industrial, irrigation, and dewatering purposes, but not including wells to be used for watering stock or for general farmstead use if the wells do not provide water for human consumption;

~~(10)(8)~~ "Water well driller" means a person who is qualified to engage in the drilling, alteration, or repair of a water well as defined in this chapter.

□ **Section 2. KRS 223.435 is amended to read as follows:**

(1) The secretary, upon recommendation of the board, shall promulgate administrative regulations establishing standards of practice for water well construction. The secretary shall utilize the manual of water well construction practices as the guidance document in the development of standards and regulations. These standards and regulations shall be proposed within one (1) year of July 13, 1984, and shall be included as a component of the certification program.

(2) The secretary, upon recommendation of the board, shall promulgate administrative regulations establishing standards of practice for the drilling of geothermal boreholes and the installation of geothermal loop systems. The administrative regulations shall include additional annually recurring certification requirements for persons engaged in the drilling of geothermal boreholes. The standards and regulations required under this subsection shall be proposed within one (1) year of the effective date of this Act.

□ **Section 3. KRS 223.455 is amended to read as follows:**

The cabinet may make such unannounced inspections as it deems necessary to determine compliance of certified individuals with the provisions of KRS 223.405 to 223.460. The cabinet shall also have the right to enter consistent with due process upon any and all property for the purpose of obtaining information about water well construction or geothermal borehole installation, whether idle, in use or abandoned.”

Danny reviewed the changes to the proposed amendment out loud to the board and stated those are the only changes I see and we need a motion and a second. Jim Bates made a motion to accept the changes and David Jackson seconded the motion. Danny called for a vote and the motion passed unanimously.

David Moore contacted the HVAC contractors and they want a chance to review the boards changes and make comments sometimes after this board meeting.

David Moore said if they get behind the bill will have no trouble getting it passed. David said he would get them a copy and we could do email or conference call to address their comments, if needed. Danny thanked David Moore on behalf of board for attending meeting and called for lunch break.

Lunch break 11:20 to 12:40.

Danny called meeting back to order.

Danny suggested that the board get the geothermal certification amendment pre-filed as soon as possible. He further suggested that if Orris goes to the legislature in support of the amendment that he take Kevin Moses for support. David Jackson suggested that they also ask Hank Hancock or someone else from the HVAC lobby or Division of Plumbing to go along and speak to the

legislature. asked if there was any other old business. No one mentioned any so Danny proceeded to new business.

Scotty then introduced support document to the board to go along with the amendment. He asked everyone to review the document. He asked if any comments or changes are needed send them to him before the pre-file date. David suggested the board to have comments back to Scotty by November 26, 2012.

Scotty initiated a discussion concerning permit fees charged in other states. David recommended looking at Ohio and Tennessee for fees. Scotty presented results of informal survey conducted of licensed drillers as to the number of wells they drill per year. Kevin Moses named several firms drilling hundreds if not thousands of geothermal boreholes a year. The discussion turned to how to ensure drillers would follow new construction regulations.

Jim bates asked if there were any instruments available to insure a borehole is properly grouted. Kevin said a conductivity test of the completed borehole will tell if it is performing properly. According to David Jackson, no other equipment currently available, to look in ground, and verify grouting. Pressure and conductivity tests are the only tools available. Kevin says that the only way to ensure proper completion is to have state inspector assigned to each job to assure proper completion.

Kevin explained that water has no density or mass to hold heat, like sand or cement. Grouting regardless of materials needs to be placed from bottom up and water zones need to be sealed off properly. Discussion of bad drilling practices Kevin was aware of on various projects around his area. He had been called in to resolve problems or observed other doing. He says borehole diameter has to be large enough to get tubing and grout pipe in hole to tremie grout properly. Jim Bates says well at least with a regulation there are some repercussions. David Jackson suggested that if drillers see inappropriate drilling activities that endanger the groundwater that they document these events. These activities can be used to illustrate the need for the amendment. Kevin says driller has no control over borehole design, this is done by engineers and architects that are not familiar with Kentucky and its unique geology.

Danny asked if anything else anyone wants to discuss under old business. No one responded with anymore old business.

New Business:

Danny asked if there was any New Business. No one responded. Danny said the issues Kevin discussed should be covered in the future construction regulations. He asked Scotty if the DOW goes out and inspects wells. Scotty said he is supposed to go out and do four audits a year. However, it is hard to do when he does not know where a driller is working and he has to wait for an owner to report a problem with the well. No permit is required so no prior notifications of a well installation.

Orris Hayes explained to board why oil and gas well drillers are not required, to be licensed. According to him, the Division of Oil & Gas requires an inspector to be on site during drilling and plugging are being performed.

David said we have a position open for an assistant in the drillers program that has yet to be filled. If the position is filled it would allow the groundwater section to spend more time doing well inspections. David said permit fees might be something that can go into the amendment as a means to fund the program. Danny asked if there was any further new business. No further new business was brought up.

Next Meeting:

Danny asked for suggestions for the date, time, and location for the next meeting. He was reminded that the next meeting would be at the annual tradeshow and workshop in early March in Louisville, Kentucky. The date needs to be set by the Kentucky Groundwater Association. David Jackson said you can have another meeting or teleconference if needed before the tradeshow. The board decided a teleconference and email would be best means of getting the amendment and other tasks completed before the next meeting at the trade show. Jim Bates asked when was the actual the legislature to meet. David said the senators and representatives will come to Frankfort in January but the official start date is February 1, 2013, but the amendment can be pre-filed. Danny stated he wanted it filed as soon as possible. Orris stated we need the document finalized and submitted to Steve Collins at LRC. Jim Bates asked for email addresses for everyone they may need to contact.

Kevin asked if there was a driller list on the Kentucky website. Scotty said yes there is and he would be putting a new list on line at:

<http://water.ky.gov/groundwater/Pages/WellDrillersProgram.aspx>. Scotty said there are several counties that do not have water well drillers in them.

A brief discussion about licensing costs in other states followed. Danny summarized the potential meeting or conferencing means before Danny asked for a motion for adjournment.

Adjournment:

Danny asked for a motion to adjourn the meeting. A motion to adjourn was made by David Jackson and seconded by Jim Bates and was passed unanimously. Danny Kelly adjourned the meeting at 13:45 p.m.

NOTE

It was determined after the meeting that by the KGWA would hold the drillers tradeshow and workshop on February 28th, 2013 and March 1st, 2013 Park at 9:00 a.m. EST on February 28th, 2013.